Claims

1. Data traffic separation method for use in a packet-oriented mobile radio network (GPRS), in which data traffic arising in an access node (GGSN) of the mobile radio network (GPRS) and consisting of a plurality of layer 2 connections (PDP contexts) comprising a plurality of data flows in each case is separated with respect to connection-specific and/or data flow-specific handling and is optionally routed proportionately via a processing unit (IP flow handler) performing such handling.
with a control function (S) within the access node (GGSN) deciding, on the basis of the application-specific information and/or the local information of an information unit (internal policy) integrated in an access node (GGSN) whether or not a layer 2 connection (PDP context) is to be routed via the processing unit (IP flow handler) where, on the basis of the application-specific information and/or the local information, connection-specific and/or data flow-specific handling is carried out in each case.

2. Method in accordance with claim 2,
characterized in that,
when a communication to an application (A) is set up by a subscriber, the application (A) of a policy decision function (PDF) transmits the application-specific information and the policy decision function (PDF) via an interface (2)) authorizes the access node (GGSN) of the mobile radio network (GPRS) to set up one layer 2 connection or a plurality of layer 2 connections (PDP contexts) comprising a plurality of data flows in each case for the requested application (A) and transmits the application-specific information.

3. Method in accordance with claim 2,

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characterized in that,
the application-specific information is routed via an
authentication, authorization and accounting server (AAA
server), in particular via a remote access dial-in user-server
(RADIUS) to the access node (GGSN).

4. Method in accordance with claim 2, 3 or 4,
characterized in that,
the application-specific information with respect to
connection-specific handling of the layer 2 connection (PDP
context) is routed to the access node (GGSN) and the
application-specific information with respect to data flow-
specific handling of data flows within the layer 2 connection
(PDP context) directly to the processing unit (IP flow
handler).

5. Method in accordance with claim 2, 3 or 4,
characterized in that
the application-specific information with respect to data
flow-specific handling of data flows within a layer 2
connection (PDP context) is routed indirectly via the access
node (GGSN) to the processing unit (IP flow handler).

6. Method in accordance with one of the preceding claims,
characterized in that
the processing unit (IP flow handler) is integrated into the
access node (GGSN) of the mobile radio network (GPRS).

7. Method in accordance with one of the preceding claims,
characterized in that
a GPRS network is used as the mobile radio network.

8. Method in accordance with one of the preceding claims,
characterized in that
the billing information is transmitted as the application-

specific information.

9. Method in accordance with one of the preceding claims, characterized in that
QoS (Quality of Service) information is transmitted as the application-specific information.

10. Method in accordance with one of the preceding claims, characterized in that
the processing unit (IP flow handler), in the case of a layer 2 connection (PDP context) routed to it, carries out a data flow-specific separation or filtering and handling.

11. Mobile radio network which has at least the following units
- an access node (GGSN) with a control function (S) for separating data traffic arising in an access node (GGSN) consisting of a plurality of layer 2 connections (PDP contexts) comprising a plurality of data flows in each case in accordance with the predetermined information,
- a processing unit (IP flow handler) for handling data flows separated by the control function (S) and layer 2 connections (PDP contexts) comprising a plurality of data flows in each case forwarded to the processing unit (IP flow handler).
with a control function (S) within the access node (GGSN) deciding, on the basis of the application-specific information and/or the local information of an information unit (internal policy) integrated in an access node (GGSN) whether or not a layer 2 connection (PDP context) is to be routed via the processing unit (IP flow handler) where, on the basis of the application-specific information and/or the local information, connection-specific and/or data flow-specific handling is carried out in each case.

12. Mobile radio network in accordance with claim 12,

characterized in that,

the mobile radio network has a policy decision function (PDF) for receiving, evaluating and the immediate forwarding of the application-specific information to the control function (S) of the access node (GGSN).

13. Mobile radio network in accordance with claim 12 or 13, characterized in that,

the processing unit (IP flow handler) comprises a filter function, which in incoming layer 2 connections (PDP contexts), can separate data flows in accordance with the data flow-specific information so that these data flows can be subject to data flow-specific handling in the processing unit (IP flow handler).